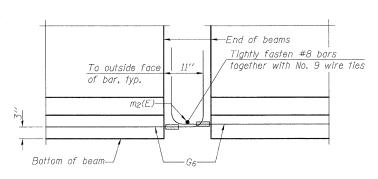
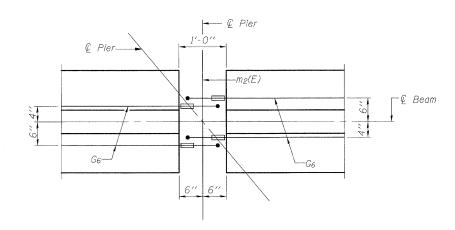
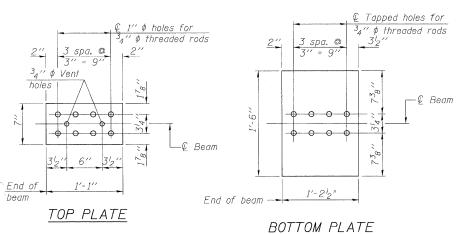
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION



ELEVATION OF BEAM AT PIER



PLAN OF BEAM AT PIER



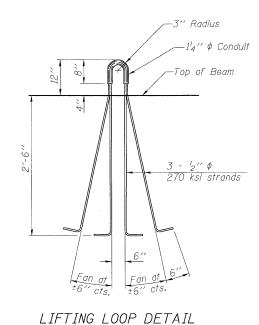
For bearing details for pintle hole locations see sheet 22 of 33.

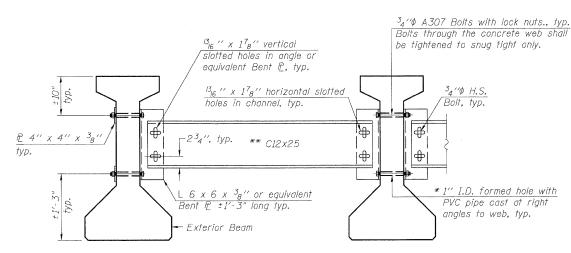
DESIGNED SCD CHECKED DRB DRAWN THW CHECKED SCD

PI-4-36D

10-1-08

IE CONSULTANTS, INC 6420 SOUTH SIXTH STREET SPRINGFIELD, ILLINOIS 62712 FAX (217) 529-4543 consultants www.ie-consultants.com





All material for bracing shall be hot dip galvanized according to AASHTO M111 unless otherwise noted. Two hardened washers are required for each set of oversized holes.

All holes shall be 1516 "\$\phi\$ unless otherwise noted. 5₁₆ " x 3" x 3" plate washers are required over all slotted holes.

All bolts shall be galvanized according to AASHTO M232. Bracing shall be installed as beams are erected and tightened as soon as possible during erection.

Permanent bracing shall not be paid for separately but shall be included in the cost of Furnishing and Erecting Precast Prestressed Concrete I-Beams.

- * Fabricator shall locate to miss strands within permissible tolerances.
- ** Alternate C12x30 channels are permitted to facilitate material acquisition.

NOTES

Inserts for $\frac{3}{4}$ " ϕ threaded dowel rods, when specified, are to be two strut, ferrule type for interior beams and single ferrule, flared loop type for exterior beams. Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be $^{l}_{2}$ " and the nominal cross-sectional area shall be 0.153 sq. in.

Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions). A minimum $2^l_2{}''$ ϕ lifting pin shall be used to engage the lifting loops during handling.

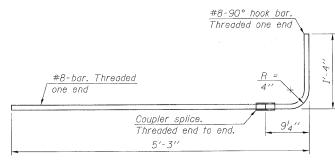
Tilt G_6 bars when necessary to maintain $1_2'''$ clearance.

The top and bottom plates shall be AASHTO M270 Grade 50.

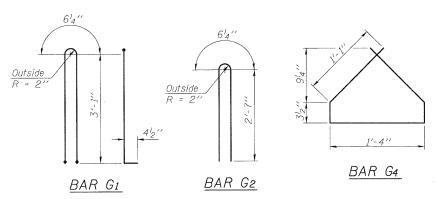
The bottom plates and studs shall be galvanized according to AASHTO M111.

Threaded rods shall be ASTM F 1554 Grade 55.

The G₆ bar assembly shall have the threaded ends oversized to ensure no reduction in cross sectional area after threading. The coupler splice shall be capable of developing 125 percent of the yield strength of the reinforcement bar.



G6 BAR ASSEMBLY



BILL OF MATERIAL

| Item | Unit | Total |
|---|------|--------|
| Furnishing and Erecting Precast Prestressed Concrete I-Beams, 36" | Ft. | 680.50 |

36" P.P.C. I-BEAM DETAILS SPANS 1 & 3 S.N. 018-0064

| SHEET NO. | F.A.P. RTE. | SECTION | | | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------|----------------|--------------|----------|---------|------------|-----------------|--------------|
| | 116 | (112BR1)B | | | CUMBERLAND | 72 | 50 |
| 33 SHEETS | | | | | CONTRACT | NO. 74 | 236 |
| | FED. RO | DAD DIST. NO | ILLINOIS | FED. AI | D PROJECT | | |

PERMANENT BRACING DETAILS FOR 36" PPC I-BEAMS